

# [CHARGE-PUMP CIRCUITRY]

## Abstract

A charge-pump circuitry which receives an external voltage source to generate a target voltage is provided. The charge-pump circuitry comprises a voltage multiplier module and a voltage difference generating circuitry. Wherein, a first input terminal of the voltage multiplier module receives the external voltage source, and the voltage multiplier module generates a multiplied-voltage according to the external voltage source. The voltage potential of the multiplied-voltage is a predetermined times of the voltage potential of the external voltage source. The voltage difference generating circuitry generates a correcting voltage which is input to a second input terminal of the voltage multiplier module. The voltage potential of the correcting voltage is the potential difference between the target voltage and the multiplied-voltage.